



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Traffic Resolution Amendment - Speed Limit Surveys on Various City Streets

MEETING DATE: June 5, 1996

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt a resolution amending the Traffic Resolution #87-163 by approving the speed limit changes on four of the ten streets shown below. The streets where speed limit changes are recommended are followed by an asterisk.

- Central Avenue*
- Cherokee Lane*
- Church Street*
- Cluff Avenue
- Elm Street
- Holly Drive
- Hutchins Street*
- Pine Street
- Rutledge Drive
- Tokay Street

BACKGROUND INFORMATION: The Public Works Department recently performed Engineering and Traffic Surveys on ten City streets. Per Section 40802(b) of the California Vehicle Code, Engineering and Traffic Surveys must be updated within a minimum of every five years on "non-local" streets.

Speeds on streets on which surveys exceed five years cannot be enforced using radar. "Non-local" streets are collector and arterial streets shown on the Federal Aid System Map. Attached as Exhibit A are the results of the surveys performed. As indicated, speed limit modifications are recommended on portions of four of the ten streets surveyed. These surveys are attached in alphabetical order by street name.

The surveys performed, which follow State of California Department of Transportation guidelines, include maps and written narratives for each street. The maps show physical characteristics and field data, such as roadway widths, number of through lanes, traffic controls, traffic volumes, prevailing speeds, and accident rates. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average citywide accident rate is 4.6 ACC/MVM. The narratives describe the data indicated in the maps and results of the survey.

Three factors should be considered in determining the speed limit most appropriate to facilitate the orderly and reasonably safe movement of traffic. These factors are prevailing speeds, unexpected conditions to drivers, and accident records. Reasonable speed limits conform to the actual behavior of the majority of motorists and, by measuring motorists' speeds, one will be able to select a speed limit both reasonable and effective. Speed limits should normally be established at the first five mile per hour (mph) increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five mph.

SURVEY RESULTS

As noted, speed limits for most of the streets studied are not recommended for changes.

APPROVED: _____

H. Dixon Flynn -- City Manager

The recommended speed limit changes are as follows:

Central Avenue

Kettleman Lane to Vine Street - Vehicle speeds recorded in this segment support a 35 mph speed limit. The accident rate of 5.2 is only slightly above the citywide average. Based on the minor disparity between accident rates, staff does not feel that continuing to enforce this segment at 30 mph is justified as this would place well over 50 percent of the drivers in violation. Based on these factors, we recommend increasing the speed limit on this segment from 30 mph to 35 mph.

Vine Street to Tokay Street - Vehicle speeds recorded in this segment support a 30 mph speed limit. The accident rate of 10.0 is well above the citywide average and about the same as the 10.1 rate from the 1991 survey. Based on the continuing high accident rate in this segment, we recommend lowering the speed limit from 30 to 25 mph in this segment.

Cherokee Lane

Kettleman Lane to Poplar Street - Vehicle speeds recorded in the segment between Kettleman Lane and Hale Road support a 40 mph speed limit. The accident rate of 2.5 is substantially below the citywide average. Based on these factors, we recommend reducing the speed limit on this segment from 45 mph to 40 mph.

Vine Street to Hale Road - This segment is also included in the survey between Kettleman Lane and Hale Road, as indicated above. During the 1991 survey, there were no existing traffic controls on the approximately one-mile segment of Cherokee Lane between Kettleman Lane and Lodi Avenue. The past survey performed indicated that a speed limit break was needed in this segment and the uncontrolled intersection of Vine Street was selected; however, changes in speed limits are usually made at major intersections where there are signals or stop controls. Since that survey, a traffic signal was installed at Hale Road. Staff recommends extending the 40 mph speed limit from Vine Street to Hale Road.

Church Street

Century Boulevard to Kettleman Lane - Vehicle speeds recorded in this segment support a 35 mph speed limit. These speeds have increased since the 1991 survey, possibly due to the widening performed on the southerly portion of this segment. This increase is understandable since drivers' speeds are affected by changes in roadway conditions. The accident rate of 4.2 is slightly below the citywide average and lower than the 5.9 rate from the 1991 survey. Based on the increased vehicle speeds and low accident rate, staff does not feel that continuing to enforce this segment at 30 mph is justified as this would place well over 50 percent of the drivers in violation. Based on these factors, we recommend increasing the speed limit on this segment from 30 to 35 mph.

Tokay Street to Lodi Avenue - Vehicle speeds recorded in this segment support a 35 mph speed limit. The speeds recorded have increased slightly since the 1991 survey. The current accident rate of 2.6 is significantly below the citywide average and has reduced from the 6.6 rate in the previous survey. Based on the increased vehicle speeds and low accident rate, staff does not feel that continuing to enforce this segment at 30 mph is justified as this would place over 50 percent of the drivers in violation. Based on these factors, we recommend increasing the speed limit on this segment from 30 to 35 mph.

Lockeford Street to Turner Road - Vehicle speeds recorded in this segment support a 35 mph speed limit. The current accident rate of 3.5 is below the citywide average and has reduced from the 5.4 rate in the 1991 survey. Based on the recorded vehicle speeds and low accident rate, staff does not feel that continuing to enforce this segment at 30 mph is justified as this would place over 50 percent of the

Traffic Resolution Amendment - Speed Limit Surveys on Various City Streets

June 5, 1996

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drivers in violation. Based on these factors, we recommend increasing the speed limit on this segment from 30 to 35 mph.

Hutchins Street

Tokay Street to Lodi Avenue - Vehicle speeds recorded in this segment support a 35 mph speed limit. Recorded vehicle speeds have increased since the 1991 survey. The current accident rate of 1.9 is still significantly below the citywide average and has slightly increased from the 0.5 rate in the previous survey. Based on the increased vehicle speeds and low accident rate, staff does not feel that continuing to enforce this segment at 30 mph is justified as this would place over 50 percent of the drivers in violation. Based on these factors, we recommend increasing the speed limit on this segment from 30 mph to 35 mph. Vehicle speeds recorded before and after the bike lanes were installed on Hutchins Street indicate only a very slight reduction in vehicle speeds. These differences were not significant and did not affect the recommended posted speed limits.

Tokay Street

Lower Sacramento Road to Mills Avenue - Recorded vehicle speeds and accident rate information from the 1991 survey supported a 35 mph speed limit. However, due to objections from the residents on this segment of Tokay Street, a 30 mph speed limit was posted. Since this limit was not supported by the survey performed in 1991, the segment could not be enforced using radar. Although the current vehicle speeds recorded continue to support a 35 mph speed limit, the accident rate has increased from the 1.5 rate recorded in the 1991 survey to the current rate of 8.7. Based on the increased accident rate, staff recommends retaining the 30 mph speed limit; however, since this limit is now supported by a valid survey, the only change is this segment will now be radar enforceable.

RECOMMENDATION

Based on the surveys performed on ten city streets, staff recommends the following speed limit changes:

<u>STREET</u>	<u>SEGMENT</u>	<u>SPEED LIMIT</u>
Central Avenue	Kettleman Lane to Vine Street	30 to 35 mph
	Vine Street to Tokay Street	30 to 25 mph
Cherokee Lane	Kettleman Lane to Poplar Street	45 to 40 mph
	Vine Street to Hale Road	35 to 40 mph
Church Street	Century Boulevard to Kettleman Lane	30 to 35 mph
	Tokay Street to Lodi Avenue	30 to 35 mph
	Lockeford Street to Turner Road	30 to 35 mph
Hutchins Street	Tokay Street to Lodi Avenue	30 to 35 mph

FUNDING: Funding for costs to modify eleven speed limit signs and legends from the Street Maintenance Account at an approximate cost of \$1,000.


Jack L. Ronsko
Public Works Director

Prepared by Rick S. Kiriou, Senior Engineering Technician

Attachments

cc: City Attorney City Engineer
 Police Chief Street Superintendent
 Associate Traffic Engineer

Recommended Speed Limit Changes

Date: May 24, 1996

Street segments where speed limits changes are recommended are shown in **bold** and *italics*.

1. Central

<i>Kettleman to Vine</i>	<i>30 to 35 mph</i>
<i>Vine to Tokay</i>	<i>30 to 25 mph</i>
Tokay to Lodi	25 mph no change
Lodi to Railroad	25 mph no change

2. Cherokee

S. city limit to Kettleman	45 mph no change
<i>Kettleman to Poplar</i>	<i>45 to 40 mph</i>
Poplar to Vine	40 mph no change
<i>Vine to Hale</i>	<i>35 to 40 mph</i>
Hale to Victor	35 mph no change
Victor to Pioneer	40 mph no change

3. Church

<i>Century to Kettleman</i>	<i>30 to 35 mph</i>
Kettleman to Tokay	35 mph no change
<i>Tokay to Lodi</i>	<i>30 to 35 mph</i>
Lodi to Lockeford	30 mph no change
<i>Lockeford to Turner</i>	<i>30 to 35 mph</i>

4. Cluff

Lodi to Victor	35 mph no change
Victor to Turner	40 mph no change

5. Elm

Lower Sac to Hutchins	35 mph	no change
Hutchins to Cherokee	25 mph	no change

6. Holly

Mills to California	30 mph	no change
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7. Hutchins

Harney to Kettleman	45 mph	no change
Kettleman to Tokay	35 mph	no change
<i>Tokay to Lodi</i>	<i>30 to 35 mph</i>	
Lodi to Lockeford	30 mph	no change

8. Pine

Ham to Church	30 mph	no change
Church to Stockton	30 mph	no change
Stockton to Cherokee	30 mph	no change
Cherokee to Beckman	30 mph	no change
Beckman to Cluff	40 mph	no change
Cluff to E. city limits	40 mph	no change

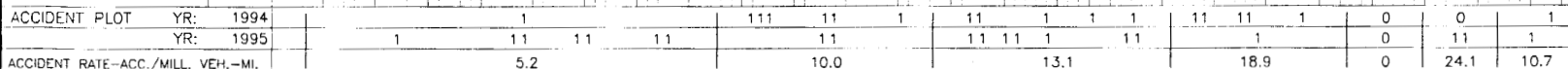
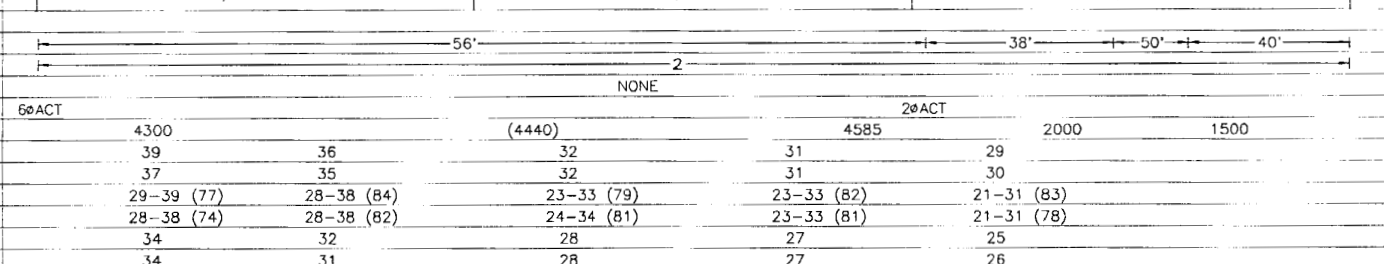
9. Rutledge

Elm to Turner	30 mph	no change
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10. Tokay

Lower Sac to Hutchins	30 mph	no change
Hutchins to Cherokee	25 mph	no change

SEE NARRATIVE FOR
BACKGROUND INFORMATION



DR: RR	No.	Date	Revision	ADPT	Approved By	 CITY OF LODI PUBLIC WORKS DEPARTMENT	CENTRAL AVE	SP Z SU
CH: <i>PSK</i> <i>RF</i>								
DATE: MAY 1996				City Engineer RCE NO. 26183	Date			

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CITY OF LODI
PUBLIC WORKS DEPARTMENT

CENTRAL AVE

**SPEED
ZONE
SURVEY**

June 1996

SPEED ZONE REPORT - Central Avenue

- **REFERENCE** - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.
- **STUDY**

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five miles per hour.

Ten radar surveys were performed and the 85th percentile speeds ranged from 29 to 39 mph as shown below:

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Kettleman Lane to Vine Street	35-37 mph	36-39 mph
Vine Street to Tokay Street	32 mph	31 mph
Tokay Street to Lodi Avenue	31 mph	31 mph
Lodi Avenue to Railroad Avenue	30 mph	29 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

Central Avenue has diagonal parking from Vine Street to Flora Street. This can cause sight distance problems for cross street traffic and exiting vehicles. This hazard is not readily apparent to the Central Avenue motorists. These factors may be a reason to consider reducing the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The accident rate on Central Avenue ranged from 0.0 to 24.1 ACC/MVM. The average Citywide accident rate is 4.6 ACC/MVM.

° CONCLUSION

Kettleman Lane to Vine Street

The 85th percentile speeds in this segment range from 35 to 39 mph. The 50th percentile speeds range from 31 to 34 mph. The accident rate of 5.2 on this segment is higher than the Citywide average but lower than the 6.5 rate from the 1991 survey. Although the rate is slightly higher than the Citywide average, the difference is minor. Based on these factors, we do not feel enforcing this segment at 30 mph is justified as this would place well over 50 percent of the drivers in violation. We recommend increasing the speed limit on this segment from 30 mph to 35 mph.

Vine Street to Tokay Street

The 85th percentile speed on this segment is 32 mph. The 50th percentile speed is 28 mph. The accident rate of 10.0 in this segment is significantly higher than the Citywide average and slightly lower than the 10.1 rate from the 1991 survey. Based solely on the 85th percentile speeds, the speed limit could be set at 30 mph; however, due to visibility problems for cross street traffic caused by diagonal parking and the difficulty drivers can experience backing out of these stalls, as indicated by the high accident rate, we recommend reducing the speed limit in this from 30 mph to 25 mph.

Tokay Street to Lodi Avenue

The 85th percentile speed on this segment is 31 mph. The 50th percentile speed is 27 mph. The accident rate of 13.1 in this segment is significantly higher than the Citywide average but lower than the 15.5 rate from the 1991 survey. Based solely on the 85th percentile speeds, the speed limit could be set at 30 mph; however, due to the high accident rate and diagonal parking along a portion of this segment, which can create visibility problems for drivers on cross streets and exiting parking stalls, we recommend retaining the 25 mph speed limit.

Lodi Avenue to Railroad Avenue

The 85th percentile speeds on this segment are 29 and 30 mph. The 50th percentile speeds are 25 and 26 mph. The highest accident rate of 24.1 in this

SPEED ZONE REPORT - Central Avenue
Page 3

segment is significantly higher than the Citywide average and much higher than the 4.0 rate from the 1991 survey. The significant increase in accident rate is due to reduced traffic volume count information. The number of accidents in this high segment increased by only 1 accident over the previous survey. Based on these factors, we recommend retaining the 25 mph speed limit in these segments.

The recommended speed limits are shown below:






<u>SEGMENT</u>	<u>POSTED SPEED LIMIT</u>
Kettleman Lane to Vine Street	30 mph to 35 mph
Vine Street to Tokay Street	30 mph to 25 mph
Tokay Street to Lodi Avenue	25 mph (no change)
Lodi Avenue to Railroad Avenue	25 mph (no change)

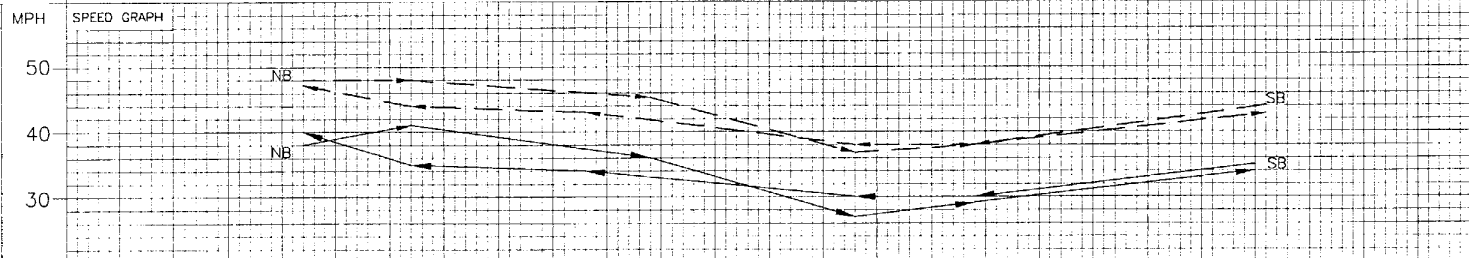
Jack L. Ronsko
Public Works Director

SEE NARRATIVE FOR
BACKGROUND INFORMATION



EXISTING SPEED ZONE	45 MPH	40 MPH	35 MPH	40 MPH
PROPOSED SPEED ZONE	45 MPH	40 MPH	35 MPH	40 MPH

	-SIGN LOCATION
R1	-STOP SIGN
R2 ()	-SPEED LIMIT SIGN (MPH)
R1-2	-YIELD SIGN
C	-INSTALLATION C [SCHOOL 25 MPH SIGNS, W65, R2(25), R72]
	-TRAFFIC SIGNAL
	-CITY LIMIT
	-CRITICAL SPEED
	-LOWER LIMIT OF PACE



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No.	Date	Revision																			



CITY OF LODI
PUBLIC WORKS DEPARTMENT

CHEROKEE LN

**SPEED
ZONE
SURVEY**

June 1996

SPEED ZONE REPORT - Cherokee Lane

- **REFERENCE** - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.
- **STUDY**

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five miles per hour.

Twelve radar surveys were performed and the 85th percentile speeds ranged from 37 to 48 mph as shown below:

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
South City Limit to Century Boulevard	48 mph	47 mph
Century Boulevard to Kettleman Lane	48 mph	44 mph
Kettleman Lane to Hale Road	45 mph	43 mph
Hale Road to Lodi Avenue	37 mph	38 mph
Lodi Avenue to Victor Road	38 mph	38 mph
Victor Road to Pioneer Drive	43 mph	44 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are a number of commercial driveways on Cherokee Lane. Visibility from these driveways is often reduced due to the on-street truck parking and landscaped median. Although this effect was not quantified to further reduce the recommended speed limit, it was considered in the overall recommendation.

SPEED ZONE REPORT - Cherokee Lane

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Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The accident rate on Cherokee Lane ranged from 0.0 to 6.5 ACC/MVM. The average Citywide accident rate is 4.6 ACC/MVM.

◦ CONCLUSION

South City Limit to Century Boulevard

The 85th percentile speeds on this segment are 47 and 48 mph. The 50th percentile speed is 43 mph. There have been no accidents in this segment in the two-year survey period. Based on these factors, we recommend retaining the 45 mph speed limit in this segment.

Century Boulevard to Kettleman Lane

The 85th percentile speeds on this segment are 44 and 48 mph. The 50th percentile speeds are 38 and 39 mph. The accident rate of 2.6 on this segment is lower than the Citywide average. Based on the low accident rate, we recommend retaining the 45 mph speed limit on this segment.

Kettleman Lane to Hale Road

The 85th percentile speeds on this segment are 43 and 45 mph. The 50th percentile speeds are 38 and 39 mph. The accident rate of 2.5 on this segment is lower than the Citywide average. Based on these factors, we recommend a 40 mph speed limit in this segment.

Hale Road to Lodi Avenue

The 85th percentile speeds on this segment are 37 and 38 mph. The 50th percentile speeds are 33 and 35 mph. Although the accident rate of 5.5 on this segment is higher than the Citywide average, the amount is minor. Based on these factors, we do not recommend reducing the speed limit in this segment and recommend retaining the 35 mph speed limit.

Lodi Avenue to Victor Road

The 85th percentile speed on this segment is 38 mph. The 50th percentile speeds are 33 and 35 mph. The highest accident rate of 6.5 on this segment is higher than the Citywide average but lower than the 8.2 rate from the 1991 survey. Based on these factors, we recommend retaining the 35 mph speed limit in this segment.

SPEED ZONE REPORT - Cherokee Lane
Page 3

Victor Road to Pioneer Drive

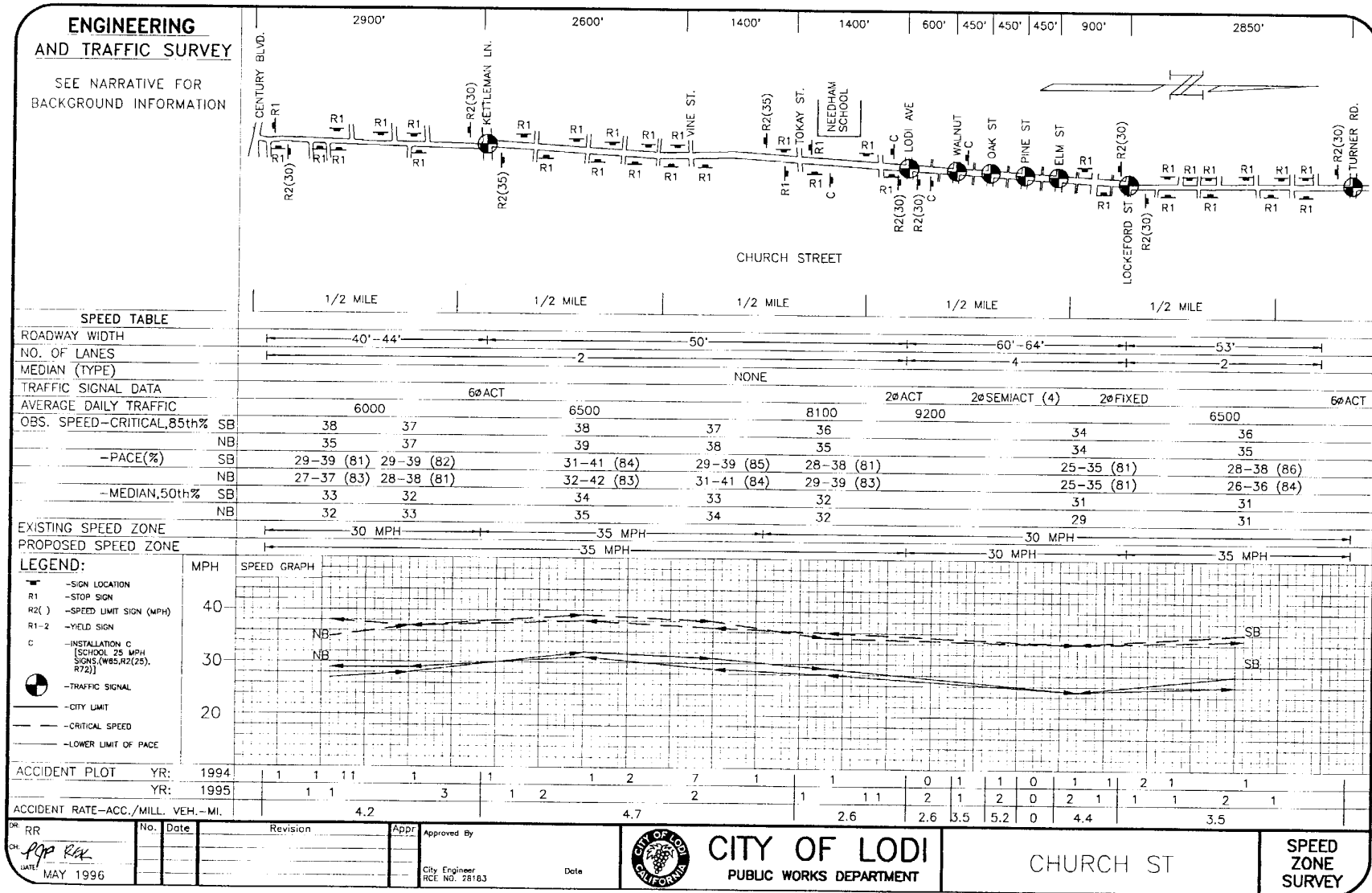
The 85th percentile speeds on this segment are 43 and 44 mph. The 50th percentile speeds are 35 and 39 mph. The highest accident rate of 4.4 on this segment is slightly lower than the Citywide average and below the 6.6 rate from the 1991 survey. Based on these factors, we recommend retaining the 40 mph speed limit in this segment.

The recommended speed limits are shown below:

<u>CHEROKEE LANE SEGMENT</u>	<u>POSTED SPEED LIMIT</u>
South City Limit to Century Boulevard	45 mph (no change)
Century Boulevard to Kettleman Lane	45 mph (no change)
Kettleman Lane to Poplar Street	45 to 40 mph
Poplar Street to Vine Street	40 mph (no change)
Vine Street to Hale Road	35 to 40 mph
Hale Road to Lodi Avenue	35 mph (no change)
Lodi Avenue to Victor Road	35 mph (no change)
Victor Road to Pioneer Drive	40 mph (no change)

Jack L. Ronsko
Public Works Director

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June 1996

SPEED ZONE REPORT - Church Street

- **REFERENCE** - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

- **STUDY**

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five miles per hour.

Fourteen radar surveys were performed and the 85th percentile speeds ranged from 34 to 39 mph as shown below:

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Century Boulevard to Kettleman Lane	35-37 mph	37-38 mph
Kettleman Lane to Tokay Street	38-39 mph	37-38 mph
Tokay Street to Lodi Avenue	34 mph	36 mph
Lodi Avenue to Lockeford Street	34 mph	34 mph
Lockeford Street to Turner Road	35 mph	36 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

The segment of Church Street from Lodi Avenue to Lockeford Street is in the downtown area. This area is commercial with high on-street parking demand and numerous driveways and alleys to private businesses and public parking areas. Activity in and out of these driveways is high. These factors may be a reason to reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The accident rate ranged from 0.0 to 5.2 ACC/MVM. The average Citywide accident rate is 4.6 ACC/MVM.

◦ CONCLUSION

Century Boulevard to Kettleman Lane

The 85th percentile speeds on this segment range from 35 to 38 mph. The 50th percentile speeds range from 32 to 33 mph. The accident rate of 4.2 in this segment is slightly lower than the Citywide average and below the 5.9 rate from the 1991 survey. Based on these factors, we do not feel that continuing to enforce this segment at 30 mph is justified, as this would place well over half of the drivers in violation. We recommend increasing the 30 mph speed limit to 35 mph in this segment.

Kettleman Lane to Tokay Street

The 85th percentile speeds on this segment range from 37 to 39 mph. The 50th percentile speeds range from 33 to 35 mph. The accident rate of 4.7 in this segment is slightly higher than the Citywide average and has increased from the 2.5 rate from the 1991 survey. This rise in accident rate appears to be due to an increase in accidents at the intersection of Church and Vine Streets. Church Street traffic is not controlled at Vine Street. Nine of the seventeen accidents in this segment occurred at Vine Street. Excluding these accidents, the rate in this segment would drop to 2.2. Based on these factors, we recommend retaining the 35 mph speed limit in this segment. Staff will be reviewing the Vine Street intersection separately to determine any improvements that may reduce accidents.

Tokay Street to Lodi Avenue

The 85th percentile speeds on this segment are 34 and 36 mph. The 50th percentile speed is 32 mph. The accident rate of 2.6 on this segment is lower than the Citywide average and significantly below the 6.6 rate from the 1991 survey. Based on these factors, we do not feel that continuing to enforce this segment at 30 mph is justified, as this would place over half of the drivers in violation. We recommend increasing the 30 mph speed limit to 35 mph in this segment.

SPEED ZONE REPORT - Church Street
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Lodi Avenue to Lockeford Street

The 85th percentile speed on this segment is 34 mph. The 50th percentile speeds are 29 and 31 mph. The highest accident rate of 5.2 in these short segments is above the Citywide average but significantly lower than the 17.4 from the 1991 survey. Although the accident rate is higher than the Citywide average, the amount is minor and has reduced dramatically. Based on these factors, we do not recommend reducing the speed limit in this segment and recommend retaining the 30 mph speed limit.

Lockeford Street to Turner Road

The 85th percentile speeds on this segment are 35 and 36 mph. The 50th percentile speed is 31 mph. The accident rate of 3.5 on this segment is lower than the Citywide average and below the 5.4 rate from the 1991 survey. Based on these factors, we do not feel that continuing to enforce this segment at 30 mph is justified, as this would place over half of the drivers in violation. We recommend increasing the 30 mph speed limit to 35 mph in this segment.

The recommended speed limits are shown below:

SEGMENT

POSTED SPEED LIMIT

Century Boulevard to Kettleman Lane
Kettleman Lane to Tokay Street
Tokay Street to Lodi Avenue
Lodi Avenue to Lockeford Street
Lockeford Street to Turner Road

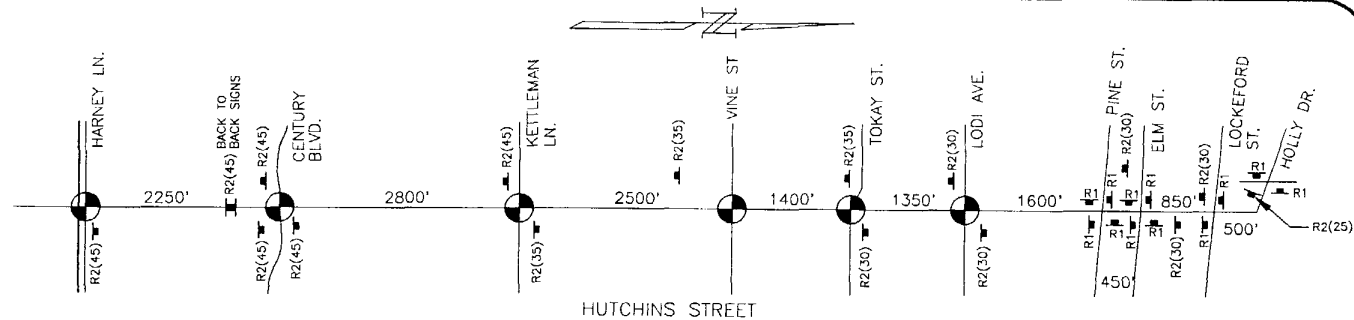
30 to 35 mph
35 mph (no change)
30 to 35 mph
30 mph (no change)
30 to 35 mph

Jack L. Ronsko
Public Works Director

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ENGINEERING AND TRAFFIC SURVEY

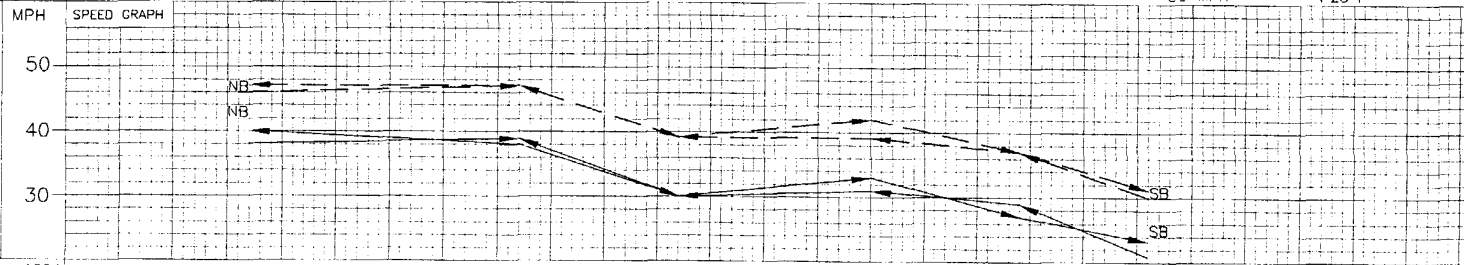
SEE NARRATIVE FOR
BACKGROUND INFORMATION



		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE					
SPEED TABLE															
ROADWAY WIDTH		84'				50'-56'				40'					
NO. OF LANES		4				2 + 2 WY LT LANE				2					
MEDIAN (TYPE)		RAISED CONCRETE (R.C.)				NONE				R.C.		NONE			
TRAFFIC SIGNAL DATA		8ø ACT		8ø ACT		8ø ACT		2ø ACT		2ø ACT		8ø ACT			
AVERAGE DAILY TRAFFIC		13000		15000		17800				11000		10500 (7050) 4050			
OBS. SPEED—CRITICAL, 85th% SB		47		47		39		39		37		30			
NB		46		47		39		42		37		31			
—PACE(%) SB		40-50 (93)		38-48 (84)		30-40 (88)		31-41 (77)		29-39 (85)		21-31 (91)			
NB		38-48 (89)		39-49 (90)		30-40 (87)		33-43 (78)		27-37 (81)		23-33 (88)			
—MEDIAN, 50th% SB		44		44		35		34		32		26			
NB		44		43		35		36		32		28			
EXISTING SPEED ZONE		45 MPH				35 MPH				30 MPH				25 MPH	
PROPOSED SPEED ZONE		45 MPH				35 MPH				30 MPH				25 MPH	

LEGEND:

- — SIGN LOCATION
- R1 — STOP SIGN
- R2() — SPEED LIMIT SIGN (MPH)
- R1-2 — YIELD SIGN
- C — INSTALLATION C (SCHOOL 25 MPH SIGNS, W65, R2(25), R2(2))
- ⊙ — TRAFFIC SIGNAL
- CITY LIMIT
- CRITICAL SPEED
- LOWER LIMIT OF PACE



ACCIDENT PLOT	YR: 1994	2	1	2	1	1	1	2	2	1	1	0	1	3	2	4	1	2	0
	YR: 1995	2	1	2		4	1	2	1	2	1	1	0	1	3	1	2	0	1
ACCIDENT RATE—ACC./MILL. VEH.—MI.		2.2			1.7				1.8			0.6		1.9		5.6	2.4	6.0	0.0

DR: RR
CH: *[Signature]*
DATE: MAY 1996

No. Date Revision
Appr. Approved By
City Engineer
RCE NO. 28183



CITY OF LODI
PUBLIC WORKS DEPARTMENT

HUTCHINS ST

**SPEED
ZONE
SURVEY**

June 1996

SPEED ZONE REPORT - Hutchins Street

- **REFERENCE** - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.
- **STUDY**

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five miles per hour.

Twelve radar surveys were performed and the 85th percentile speeds ranged from 30 to 47 mph as shown below:

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Harney Lane to Century Boulevard	46 mph	47 mph
Century Boulevard to Kettleman Lane	47 mph	47 mph
Kettleman Lane to Vine Street	39 mph	39 mph
Vine Street to Tokay Street	42 mph	39 mph
Tokay Street to Lodi Avenue	37 mph	37 mph
Lodi Avenue to Lockeford Street	31 mph	30 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

The segment of Hutchins Street from Kettleman Lane to Vine Street is primarily residential with numerous cross streets and private driveways. Since parking is allowed, visibility from these driveways and cross streets can be difficult at times. These unexpected conditions may be a reason to reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM).

The accident rate ranged from 0.0 to 5.6 ACC/MVM. The average Citywide accident rate is 4.6 ACC/MVM.

◦ CONCLUSION

Harney Lane to Century Boulevard

The 85th percentile speeds on this segment are 46 and 47 mph. The 50th percentile speed is 44 mph. The accident rate of 2.2 in this segment is lower than the Citywide average and slightly higher than the 2.0 rate from the 1991 survey. Based on these factors, staff recommends retaining the 45 mph speed limit in this segment.

Century Boulevard to Kettleman Lane

The 85th percentile speed on this is 47 mph. The 50th percentile speeds are 43 and 44 mph. The accident rate of 1.7 is lower than the Citywide average and slightly higher than the 0.9 rate from the 1991 survey. Based on these factors, staff recommends retaining the 45 mph speed limit in this segment.

Kettleman Lane to Vine Street

The 85th percentile speed on this segment is 39 mph. The 50th percentile speed is 35 mph. The accident rate of 1.8 is below the Citywide average and slightly higher than the 1.5 rate from the 1991 survey. Based solely on the 85th percentile speeds, we recommend retaining the 35 mph speed limit in this segment.

Vine Street to Tokay Street

The 85th percentile speeds on this segment are 39 and 42 mph. The 50th percentile speeds are 34 and 36 mph. The accident rate of 0.6 is below the Citywide average and significantly lower than the 3.2 from the 1991 survey. Based solely on the 85th percentile speeds, this segment could be set at 40 mph; however, since short speed zones are not recommended unless in transition areas, we recommend retaining the 35 mph speed limit in this segment.

Tokay Street to Lodi Avenue

The 85th percentile speed on this segment is 37 mph. The 50th percentile speed is 32 mph. The accident rate of 1.9 is below the Citywide average and slightly higher

SPEED ZONE REPORT - Hutchins Street
Page 3

than the 0.5 rate from the 1991 survey. Based on these factors, staff recommends increasing the speed limit from 30 to 35 mph on this segment.

Lodi Avenue to Lockeford Street

The 85th percentile speeds on this segment are 30 and 31 mph. The 50th percentile speeds are 26 and 28 mph. The highest accident rate of 6.0 in this segment is higher than the Citywide average but significantly lower than the 12.2 rate from the 1991 survey. Based on these factors, staff recommends retaining the speed limit of 30 mph on this segment.

The recommended speed limits are shown below:

HUTCHINS STREET SEGMENT

POSTED SPEED LIMIT

Harney Lane to Century Boulevard	45 mph (no change)
Century Boulevard to Kettleman Lane	45 mph (no change)
Kettleman Lane to Vine Street	35 mph (no change)
Vine Street to Tokay Street	35 mph (no change)
Tokay Street to Lodi Avenue	30 to 35 mph
Lodi Avenue to Lockeford Street	30 mph (no change)

Jack L. Ronsko
Public Works Director

RESOLUTION NO. 96-63

A RESOLUTION OF THE LODI CITY COUNCIL
APPROVING SPEED LIMIT CHANGES ON CENTRAL AVENUE,
CHEROKEE LANE, CHURCH STREET AND HUTCHINS STREET, AND
THEREBY AMENDING TRAFFIC RESOLUTION NO. 87-163

WHEREAS, speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code, which are outlined in Chapter 8 of the Caltrans Traffic Manual.

RESOLVED, that the City Council of the City of Lodi does hereby approve the speed limit changes on Central Avenue, Cherokee Lane, Church Street, and Hutchins Street as shown below:

<u>STREET</u>	<u>SEGMENT</u>	<u>SPEED LIMIT</u>
Central Avenue	Kettleman Lane to Vine Street	30 to 35 mph
	Vine Street to Tokay Street	30 to 25 mph
Cherokee Lane	Kettleman lane to Poplar Street	45 to 40 mph
	Vine Street to Hale Road	35 to 40 mph
Church Street	Century Boulevard to Kettleman Lane	30 to 35 mph
	Tokay Street to Lodi Avenue	30 to 35 mph
	Lockeford Street to Turner Road	30 to 35 mph
Hutchins Street	Tokay Street to Lodi Avenue	30 to 35 mph

FURTHER RESOLVED, that City of Lodi Traffic Resolution No. 87-163, Section 7 "Speed Limits" is hereby amended by designating speed limit changes on Central Avenue, Cherokee Lane, Church Street, and Hutchins Street as shown above.

Dated: June 5, 1996


I hereby certify that Resolution No. 96-63 was passed and adopted by the City Council of the City of Lodi in a regular meeting held June 5, 1996, by the following vote:

AYES: COUNCIL MEMBERS - Davenport, Mann, Pennino, Sieglock and Warner (Mayor)

NOES: COUNCIL MEMBERS - None

ABSENT: COUNCIL MEMBERS - None

ABSTAIN: COUNCIL MEMBERS - None


JENNIFER M. PERRIN
City Clerk